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10/670,582	09/25/2003	Clifton Harold Bromley	03SW169 / ALBRP314US	7480

7590 10/30/2007	EXAMINER	
Susan M. Donahue	KENNEDY, ADRIAN L	
Rockwell Automation, 704-P, IP Department		
1201 South 2nd Street	ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 August 2007</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-40</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-40</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 September 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>7/30/04</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Examiner's Detailed Office Action

In view of the Appeal Brief filed on 8/14/07, PROSECUTION IS HEREBY

REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following

two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an

appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee

can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have

been increased since they were previously paid, then appellant must pay the difference between

the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below:

David Vincent

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-28, 33-35, 37-38 and 40 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wolff et al. (USPubN 2003/0120714).

Regarding claim 1:

Wolff et al. teaches,

(Currently Amended) A computer implemented system that renders data in an industrial

automation environment (Paragraphs 0001 and 0002; disclosed as an interface for

machine vision system), comprising:

a human machine interface (HMI) (P 0016; "*human/machine interface (HMI)*")

that presents the data in a plurality of device platforms (P 0017; "*computer*

(handheld, laptop or fixed PC), a Personal Digital Assistant (PDA), or another

form of remote computing device"; See Response to Arguments Below);

a device analyzer that determines properties associated with a plurality of devices

having disparate device platforms, intended for delivery of data (P 0017; "*the*

processor, accordingly includes an application that supports transmission and

receipt of data in a desired portable-device compatible format"; See Response to

Arguments Below); and

an HMI generator that generates code and/or data for the HMI in accordance with

determined properties of the devices (P 0017; "*the processor, accordingly*

includes an application that supports transmission and receipt of data in a

desired portable-device compatible format"; See Response to Arguments Below),

and delivers the code and/or data to the respective devices based on attributes of

the respective device platforms (P 0044; *"the PDA services layer 410 is a PDA-*

specific code set that supports the chosen PDA-based HMI device"; See Response

to Arguments Below).

Regarding claim 2:

Wolff et al. teaches

(Original) The system wherein the device analyzer comprising a memory and a processor

(Figs 2 and 3; processing element 280 and memory 282; page 4, paragraphs 0038 and

0039).

Regarding claim 3:

Wolff et al. teaches

(Original) The system wherein the processor utilizes artificial intelligence techniques to

properly render the data (P 0052, *"...using an advanced statistical algorithm to convert*

MVS image data to the appropriate gray level and format based upon weight factors that

may favor certain characteristics of the reduced-power display of a PDA").

Regarding claim 4:

Wolff et al. teaches

(Original) The system wherein the HMI generator automatically modifies code and/or

data associated with the HMI for display on a new device for which the HMI was not

originally configured, wherein the HMI is modified according to the determined

properties of the new device (P 0043-0044, modifying a generic application interface into

a PDA-specific interface).

Regarding claim 5:

Wolff et al. teaches

(Original) The device analyzer wherein artificial intelligence techniques are employed in

connection with manipulating a mapping (P 052, "...*using an advanced statistical*

algorithm to convert MVS image data to the appropriate gray level and format based

upon weight factors that ma favor certain characteristics of the reduced-power display

PDA". Disclosed as mapping colors in an image data converting it to the appropriate

gray level.).

Regarding claim 6:

Wolff et al. teaches

(Original) The system employed in a processing environment comprising at least one of a

personal computer; a desktop computer; a laptop computer; a personal digital assistant; a

hand-held computer; a cell phone; and a tablet computer (P 0017).

Regarding claim 7:

Wolff et al. teaches

(Currently Amended) The system wherein one or more of the device(s) coupled to the

HMI generator is at least one of: a display; a data store; and a server (Fig. 2, display 250,

P 0033).

Regarding claim 8:

Wolff et al. teaches

(Original) The system wherein the HMI generator comprising:

a processing element that facilitates creation of one or more multi-dimensional

software objects that render data in multiple dimensions and/or formats at

substantially the same time (Fig. 16; P0078-0079; disclosed as making live

images and displaying them in the Live Display in real time, allowing for a

portion of an image to be magnified and displayed in a zoom window); and

a component that obtains a common data input for the one or more multi-

dimensional software objects (Fig. 2, image element 202; P 0030).

Regarding claim 9:

Wolff et al. teaches

(Original) The system wherein specific data is assigned to a software object (P 0066;

disclosed as HTML objects).

Regarding claim 10:

Wolff et al. teaches

(Original) The system wherein the data varies at least one of size; color; translational

location; rotation of a software object: text; audio; video; visibility; enable/disable state;

object state; object type; object text; trending zoom level; audio volume; specification of

audio clips; specification of video clips; and starting and/or stopping animation.

The examiner takes the position that Wolff et al. teaches the features of claim 10 in

Paragraph 0065. Wolff et al. teaches texts, states and other data which are included in the

disclosed GUI elements as menu, button, etc.

Regarding claim 11:

Wolff et al. teaches

(Original) The system wherein changes to the common data input affect the one or more

multi-dimensional software objects (P 0078; images are shown in real time, therefore any

change in input will affect the images).

Regarding claim 12:

Wolff et al. teaches

(Original) The system wherein the HMI generator further comprising:

　　　a component that associates one or more software objects with one or more

　　　physical devices (Fig. 2, images sensor 220; P 0031); and

　　　a component that generates software objects wherein the one or more software

　　　objects are associated with data corresponding to the one or more physical devices

　　　(P 0043),

the physical devices affecting changes to the software objects and the software

objects affecting changes to the physical devices (P 0085; disclosed by

establishing a two-way communication between the sensor's communication

interface and controller's interface).

Regarding claim 13:

Wolff et al. teaches

(Original) The system wherein the one or more software objects imported from an

outside source (P 0046, generic application that includes GUI objects is loaded over the

communication link).

Regarding claim 14:

Wolff et al. teaches

(Original) The system further comprising an interface to facilitate selection of data to

associate with physical devices (Fig. 9; P 0069; setup page).

Regarding claim 15:

Wolff et al. teaches

(Original) The system further comprising an interface to facilitate selection of specific

attributes of software objects corresponding to data associated with physical devices (P

0065).

Regarding claim 16:

Wolff et al. teaches

>(Original) The system further comprising: a component that renders data based on one or
>
>more of a user access data level, a data type and a data state wherein the component is
>
>employed in an HMI residing in a processing environment (P 0066; disclosed as a web
>
>browser).

Regarding claim 17:

Wolff et al. teaches

>(Original) The system further comprising a user-based association between displayed
>
>data and at least one of: a user access level; a data type; and a data state (Fig. 8 owner
>
>window 818, P 0067 discloses associating data with a particular user)

Regarding claim 18:

Wolff et al. teaches

>(Currently Amended) A computer implemented system that renders data in an industrial
>
>automation environment comprising:
>
>>a human machine interface (HMI) (P 0016; *"human/machine interface (HMI)"*;
>>
>>See Response to Arguments Below) that presents the data to an operator (P 0033;
>>
>>*"the HMI device includes a display 250 capable of displaying"*; See Response to
>>
>>Arguments Below);

a component that determines if the format and/or sub-format of the data is known

to the system (P 0052; See Response to Arguments Below); and

an artificial intelligence component that determines the format of unknown data

received by the HMI (P 0052; See Response to Arguments Below); and

a processing component that process and renders the data in the HMI in a suitable

format (P 0078).

Regarding claim 19:

Wolff et al. teaches

(Original) The system wherein the artificial intelligence locates and renders a partial data

set (P 0054).

Regarding claim 20:

Wolff et al. teaches

(Original) The system wherein further comprising a memory which stores previously

unknown data types to compare with future data (P 0051, "...*the memory organization is*

altered so that it comports with the format preferred by a PDA").

Regarding claim 21:

Wolff et al. teaches

(Original) The system wherein the HMI renders the data into at least one of text; audio;

video; static image(s); and interactive image(s) (P 0078, displaying images in real time).

Regarding claim 22:

Wolff et al. teaches

(Original) The system wherein in providing an error message when data cannot be

rendered (P 0066; disclosed as rendering through a web browser. It would have been

widely known by one of ordinary skill in the art, that an error message is presented in a

web browser when said browser is unable to render web page data, due to an inability to

reach a particular web page.).

Regarding claim 23:

Wolff et al. teaches

(Original) The system wherein data is rendered in a format and/or sub-format suitable to

the display capabilities of the device on which the data is to be presented (P 0056).

Regarding claim 24:

Wolff et al. teaches

(Currently Amended) A method to display data based at least in part on a zoom level

selected by a user comprising:

displaying data associated with process points in a plurality of disparate views,

the data can be hidden or exposed to the user in respective disparate views (P

0054; See Response to Arguments Below); and

displaying respective views associated with a corresponding zoom level (P 0079;

See Response to Arguments Below).

Regarding claim 25:

Wolff et al. teaches

(Original) The method further comprising:

presenting data associated with a zoom level chosen by the user (P 0054); and

suppressing data associated with a zoom level chosen by the user (P 0079).

Regarding claim 26:

Wolff et al. teaches

(Original) The method further comprising assigning the data and the zoom levels (P

0079, selecting portion of an image for zooming using a stylus and displaying on the Live

Image screen).

Regarding claim 27:

Wolff et al. teaches

(Original) The method further comprising allowing the zoom level and the data to be

associated in a non-linear relationship (P 0079, selected area of any size can be magnified

to fill the screen).

Regarding claim 28:

Wolff et al. teaches

(Original) The method further comprising an artificial intelligence component capable of

inferring a default zoom level based on a user preference (P 0079, user expresses the

preferences by selecting an area with a stylus; selected area is zoomed to a default level

by fitting selected image to fill the screen).

Regarding claim 33:

Wolff et al. teaches

(Currently Amended) A computer implemented method that facilitates rendering of data

in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an

interface for machine vision system), comprising:

determining formatting requirements (P 0052; See Response to Arguments

Below) associated with a plurality of devices having disparate platforms, intended

for delivery of data (P 0017; *"computer (handheld, laptop or fixed PC), a*

Personal Digital Assistant (PDA), or another form of remote computing device" ;

See Response to Arguments Below); and

formatting the data respectively in accordance with the determined formatting

requirements of the devices (Page 6, left column, lines 12-16; See Response to

Arguments Below);

delivering the formatted data to the respective devices (Page 6, left column, line

16-21; See Response to Arguments Below);

displaying (P 0044; *"creation of a specific set of GUI display screens and*

buttons") the formatted data based on attributes of the respective device platform

(See Response to Arguments Below).

Regarding claim 34:

Wolff et al. teaches

(Original) The method further comprising reformatting data associated with an existing

HMI for delivery to a newly detected device based on the determined formatting

requirements of the newly detected device (P 0043-0044, modifying a generic application

interface into a PDA-specific interface).

Regarding claim 35:

Wolff et al. teaches

(Currently Amended) A computer implemented method that facilitates rendering of data

in an industrial automation environment (P 0001-0002; disclosed as an interface for a

machine vision system) comprising:

receiving data from a physical device to an HMI (Page 6, left column, lines 1-10);

and

comparing the data format to data formats known to the HMI (Page 6, paragraph

0052, See Response to Arguments Below); and

determining the format of unknown data received by the HMI (Page 6, paragraph

0052; See Response to Arguments Below); and

processing (P 0052, disclosed as formatting); and

rendering the data in the HMI in a suitable format (P 0078).

Regarding claim 37:

Wolff et al. teaches

(Currently Amended) A computer implemented system facilitates rendering of data in an

industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface

for machine vision system), comprising:

means to determine properties associated with a plurality of devices intended for

delivery of data (P 0050, properties of PDA are determined when a

communication with MVS is established; see also paragraph 0047 for additional

disclosure of properties established through a handshaking process; See Response

to Arguments Below); and

means to format the data respectively in accordance with the determined

properties of the devices (P 0044); and

means to deliver the formatted data to the respective devices (P 0050, "...*machine*

vision program is stored in the sensor's program memory 284 (or another

dedicate memory), and is transferred into the PDA when requested by the PDA

via the PDA services layer").

Regarding claim 38:

Wolff et al. teaches

(Currently Amended) A computer implemented system that facilitates rendering of data

in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an

interface for machine vision system) comprising:

  means to determine if a format of the data is known to the system (P 0052,

  application software converts image data from an MVS format to a format

  acceptable in a PDA); and

  means to determine the format of unknown data received by the HMI (P 0052;

  See Response to Arguments Below); and

  means to process and render the data in the HMI in a suitable format (P 0078).

Regarding claim 40:

Wolff et al. teaches

  (Currently Amended) A computer implemented system that displays data based at least in

  part on a zoom level selected by a user comprising:

  means to display data associated with process points in a plurality of disparate

  views, the data can be hidden or exposed to the user in respective disparate views

  (P 0054; See Response to Arguments Below); and

  means to display respective views associated with a corresponding zoom level (P

  0079; See Response to Arguments Below).

3.   Claims 29-32, 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wolff et al. (USPubN 2003/0120714) in view of Shteyn (USPN 6,199,136).

Regarding claims 29, 36 and 39:

Wolff et al. teaches

> (Currently Amended) A computer implemented system that facilitates recognizing and/or
>
> creating a software object representing a physical device (Paragraphs 0001 and 0002;
>
> disclosed as an interface for machine vision system), comprising:
>
> > an HMI generator that formats the data respectively in accordance with the
> >
> > determined properties of the devices (P 0044);

Shteyn teaches

> A software object generator that determines properties associated with a plurality of
>
> devices intended for creation of the software object (col. 6, lines 14-17 and col. 4, lines 5-
>
> 25; See Response to Arguments Below); and
>
> an HMI that controls the physical device utilizing the software object representing the
>
> device (col. 2, lines 1-22; "*device control model*"; and col. 6, lines 28-33; See Response
>
> to Arguments Below).
>
> It would have been obvious to one ordinary skill in the art to combine the invention of
>
> Wolff et al. with the invention of Shteyn for the purpose of controlling devices using
>
> abstract representations (C 1, L 57-58).

Regarding claim 30:

Shteyn teaches

(Original) The system further comprising an artificial intelligence component utilized to recognize a new device added to the system (col. 4, lines 27-50; disclose as the recognition of new devices with any additional functionality that is not present in the embedded device control module).

Regarding claim 31:

Shteyn teaches

(Original) The system further comprising recognizing substantially all the components coupled to the system (col. 4, lines 20-25).

Regarding claim 32:

Shteyn teaches

(Original) The system further comprising a mapping element to provide connectivity to the physical devices (col. 3, lines 37-39).

Response to Arguments

Applicant's arguments filed on August 14, 2007 have been fully considered but are found to be non-persuasive. The unpersuasive arguments made by the Applicant are stated below:

In reference to Applicant's argument:

> There is nothing in these paragraphs or elsewhere in the cited document to disclose or suggest a *device analyzer that determines properties associated with a plurality of device **having disparate device platforms**, intended for delivery of data.*

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's

argument to be non-persuasive. This is due substantially to the broadness of the applicant's

claimed invention.

During examination, the claims must be interpreted as broadly as their terms

reasonably allow. MPEP 2111.01 [R-5]

Due to the lack of a specific claiming in the applicant's claimed invention, the examiner has

taken the position that a "device analyzer" is any object that "determines properties associated

with a plurality of devices having disparate device platforms" or facilitates the "[determining of

the] properties associated with a plurality of device having disparate device platforms".

Therefore, based on a broadest interpretation of this claiming, the examiner has found that the

applicant's claiming would have been obvious to one of ordinary skill in the art in light of Wolff

et al. teaching the use of an *"application"* (the applicant's claimed "device analyzer") which

"supports transmission and receipt of data in a desired portable-device compatible format and

speed" (the applicant's claimed "determining of properties" is obvious in light of Wolff et al.

teaching the *"transmission and receipt of data in a desired portable-device compatible format*

and speed") for a *"web browser"* and *"PDA"* (i.e. applicant's claimed "disparate device

platforms"). (The above citations from the invention of Wolff et al. are found in Paragraph 0017

of his disclosure.)

In reference to Applicant's argument:

> There is nothing in paragraphs [0044] or [0050] or elsewhere in this cited document to disclose or
> suggest an *HMI generator that generates code and/or data for the HMI in accordance with*
> *determined properties of the devices, and delivers the code and/or data to respective devices*

> *based on attributes of the respective device platforms*, as recited in claim 1 (and similarly independent claims 33 and 37).

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's argument to be non-persuasive. The examiner takes the position that an "HMI generator" is any object that "generates code and/or data for the HMI in accordance with determined properties of the devices, and delivers the code and/or data to the respective devices based on attributes of the respective device platforms". The examiner takes the position that applicant's claimings would have been obvious to one of ordinary skill in the art in light of Wolff et al. teaching the *"formatting"* (the applicant's claimed "generation") of *"data communicated"* (the applicant's claimed "[delivering of] code and/or data") *"so that it is read at a data speed and level of resolution [...] this is appropriate to the portable device"* (the applicant's claimed " code and/or data" which is "based on attributes of the respective device platforms"). (The above citations from the invention of Wolff et al. are found in Paragraph 0017 of his disclosure.)

In reference to Applicant's argument:

> There is no disclosure or suggestion of any sort of multiple device flexibility...

Examiner's response:

The examiner has considered the applicant's arguments, but has found the applicant's argument to be non-persuasive. The examiner takes the position that the support for "multiple device flexibility" in the invention of Wolff et al., would have been obvious to one of ordinary skill in light of him teaching that his portable device can be a *"web-browser equipped computer*

(handheld, laptop, or fixed PC), a Person Digital Assistant (PDA), or another form of remote

computing device" and in teaching the "transmission and receipt of data in a desired portable-

device" for "web browser viewing **and** a PDA". (The above citations from the invention of

Wolff et al. are found in Paragraph 0017 of his disclosure.)

In reference to Applicant's argument:

> In any event, Wolff et al. is simply concerned with compressing image data, and there is nothing
> in this passage that discloses or suggests *a component that determines if the format and/or sub-*
> *format of the data is known to the system.*

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's

argument to be non-persuasive. The examiner takes the position that the applicant's broadly

claimed "component that determines if the format and/or sub-format of the data is known" is

inherent in the invention of Wolff et al. This inherency is present in Wolff et al. teaching the

"*transmission and receipt of data in a desired portable-device compatible format*". Furthermore,

it would have been obvious to one of ordinary skill in the art, that the "*transmission and receipt*

of data" in a "*portable-device compatible format*" would not have been possible if said "format"

was not known.

In reference to Applicant's argument:

> Additionally, there is no disclosure or suggestion within the four corners of Wolff et al. of *an*
> *artificial intelligence component that determines the format of unknown data received by the HMI,*
> as recited in amended claim 18 (and similarly independent claims 35 and 38).

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's argument to be non-persuasive. The examiner takes the position that while the applicant's claimed invention recites the use of an "artificial intelligence component". However, this claiming is substantially broad. The examiner has found that a non-limiting reasonable interpretation of the phrase "artificial intelligence component" would be any component that will facilitate logical operations. While this interpretation may not be the applicant's intended interpretation, the examiner asserts that this interpretation would have been known by one of ordinary skill in the art and does not teach against the applicant's disclosure.

Therefore, based on the broadness of the applicant's claimed "artificial intelligence component", the examiner additionally takes the position that the said "component" would have been obvious to one of ordinary skill in the art, in light of Wolff et al. teaching the use of *"a variety of techniques can be employed for converting image data [...] to a format acceptable in a PDA"* (Paragraph 0052). This obviousness is supported by the fact that the applicant's "artificial intelligence component" is a subset of the "variety of techniques" taught by Wolff et al., where both the "component" and the "techniques" are used to determine the format of data to be delivered to an "HMI" (the PDA in the invention Wolff et al.).

In reference to Applicant's argument:

> There is nothing in these paragraphs nor the remainder of the cited document that discloses or suggests *displaying data associated with process points in a plurality of disparate views, the data can be hidden or exposed to the user in respective disparate views*, as recited in amended claim 24 (and similarly independent claim 40).

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's

argument to be non-persuasive. Due to the lack of a specific recitation as to what is meant by the

phrase "displaying data associated with process points" in the applicant's claimed invention, the

examiner takes the position that the applicant's previously cited claiming would have been

obvious to one of ordinary skill in the art in light of Wolff et al. teaching the *"[displaying] of*

images" (applicant's claimed displayed data) during the process of *"magnification"* (applicant's

claimed process) which is taught in Paragraph 0054. The examiner additionally asserts that it is

obvious to one of ordinary skill in the art that displayed images are associated with specific

process points during the process of magnification.

In reference to Applicant's argument:

> There is nothing in these passages or elsewhere in this cited document that would disclose or
> suggest a *software object generator **that determines properties associated with a plurality of
> devices** intended for creation of the software object.*

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's

argument to be non-persuasive. Due to the broad recitation of the applicant's "software object

generator" the examiner takes the position that the applicant's claimed "software object

generator" is any object "that determines properties associated with a plurality of devices

intended for creation of the software object". Therefore, based on this position, the examiner

asserts that the applicant's claimed "software object generator" would have been obvious in light

of Shteyn teaching the modeling of devices as abstract representations of said objects

(applicant's claimed software object generator that creates software objects) where the modeling

uses the properties of the device to expose the device controls (applicant's claimed determining

of properties associated with a plurality of devices) in Column 6, Lines 14-17. Furthermore, the

examiner has found that it would have been of obvious to one of ordinary skill in the art to call

the object which facilitates the process of generating abstract representations of devices, a

"software object generator".

In reference to Applicant's argument:

> Neither is there any disclosure or suggestion of an *HMI generator [that] formats data respectively in accordance with the determined properties of the devices.*

Examiner's response:

The examiner has considered the applicant's argument and consider the applicant's

argument moot in light of the newly presented rejection, as set forth above.

In reference to Applicant's argument:

> And clearly, nothing in this cited document discloses or suggests an *HMI that controls the physical device utilizing the software object representing the device.*

Examiner's response:

The examiner has considered the applicant's argument, but has found the applicant's

argument to be non-persuasive. The examiner takes the position that the applicant's claimed

"controlling of a physical device utilizing the software object representing the device", is

obvious in light of Shteyn teaching the "manipulation" of an "object by setting or retrieving its

properties". Where, when the properties of the object are set or modified, the corresponding

device's properties are set or modified (Column 6, Lines 28-33).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Adrian L. Kennedy whose telephone number is (571) 270-1505. The

examiner can normally be reached on Mon -Fri 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

David Vincent can be reached on (571) 272-3080. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALK

David Vincent
Supervisory Patent Examiner
Technology Center 2100